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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,697	09/15/2003	Takeshi Nagai	242754US-2SRD CONT	7372

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EXAMINER

DIEP, NHON THANH

ART UNIT PAPER NUMBER

2621

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,697

Applicant(s)

NAGAI ET AL.

Examiner

Nhon T. Diep

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-7 and 9-21 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/15/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/2003, 4/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 19-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Regarding claims 19-20, claims 19 and 20 recite a picture encoding program stored in a computer readable medium; however, the claims do not specifically recite a picture encoding computer program stored in a computer readable medium, when executed by the computer, the computer program includes... And therefore, claims 19-20 are computer per se and not directed to statutory subject matter.

Claim Objections

3. Claim 20 is objected to because of the following informalities: The preamble should be changed to read "A picture decoding program...". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-7, 10-15, 16, 17, 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiang et al (US 6,144,701).

Chiang et al discloses a stereoscopic video coding and decoding apparatus and method comprising the same picture encoding method comprising:

receiving an input video signal (fig. 2, input to el. 205),

encoding the video signal using reference picture signal generate a video code stream (fig. 2, el. 225 and col. 3, ln. 9-50, specially lines 40-42),

encoding the reference picture signal to generate a reference picture code stream (fig. 2, el. 205), and

multiplexing the video code stream with the reference picture code stream to generate an output code stream (fig. 2, el. 220) as specified in claims 1, 5, 19 and 21 .

Re claims 2 and 6: wherein encoding the video signal includes storing in a frame memory a local decoded picture signal generated in encoding the video signal, and encoding the reference picture signal including encoding the reference picture signal read out from the frame memory (Since all of the encoders disclosed are MPEG encoders, and coder 225 must have a local memory for storing frame memory).

Re claim 3: wherein the reference picture signal includes a plurality of picture signals obtained by subjecting the encoded moving picture to a local decoding (el. 205 is an MPEG encoder).

Re claims 4 and 10: wherein encoding the video signal encodes video signal units of a macroblock, encoding the reference picture signal encodes the reference picture signal in units of a macroblock, and the multiplexing multiplexes the video code

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stream with the reference method comprising: picture code stream in units of macroblock (fig. 3A).

Re claims 7: wherein the reference picture includes plurality of pictures obtained by subjecting the encoded moving picture to a local decoding (el. 205: MPEG encoder).

Re claims 11, 14 and 20: a picture decoding method comprising:

receiving an input code stream containing a video code stream obtained by encoding a video signal and a reference picture code stream obtained by encoding a reference picture signal (input to el. 230 of fig. 20);

decoding the reference picture code stream contained in the input code stream to generate a first reference picture signal (el. 235); and

decoding the video code stream contained in the input code stream by selectively using one of a second reference picture signal obtained from a previous picture signal and the first reference picture signal to generate a playback picture signal (el. 250, P frames or B frames could be decoded using previous I and/or P frames and output 260).

Re claims 12 and 15: decoding the video code stream includes storing in a frame memory the first reference picture signal and the playback picture signal as the second reference picture signal, and decoding the video code stream by selectively reading out the second reference picture signal and the first reference picture signal from the frame memory (typical MPEG decoder).

Re claims 13 and 18: decoding the video code stream includes storing the playback picture signal as the second reference picture signal in the frame memory, and decoding the video code stream by replacing the second reference picture signal stored

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the frame memory with the first reference picture signal (in order to decode B frame of any GOP, anchor frames (I and/or P) frames need to be stored and when anchor frames are not needed, the new anchor frame will be stored in place of the previous anchor frame memory).

Re claims 16: wherein the first decoding unit decodes reference picture code stream which is contained in the input code stream to generate the first reference picture signal (el. 235), and the second decoding unit includes a frame memory which stores the playback picture signal as the second reference picture signal, and a motion compensation unit configured to subject one of the second reference picture signal read out from the frame memory and the first reference picture signal to motion compensation (MPEG coder 250).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al.

As applied to claims 5 and 14 above, it is noted that Chiang et al does not particularly disclose that the multiplexing unit includes a first determination unit configured to determine whether or not the input code stream containing the video code stream and the reference picture code stream is the reference picture code stream, a

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second determination unit configured to, when the first determination unit determines that the input code stream is the reference picture code stream, determine whether or not output the reference picture code stream, and an output unit configured to output the input code stream as the output code stream in accordance with a result of the second determination unit. However, it would have been obvious to one ordinary skilled level in the art at the time the invention was made to differentiate between the reference picture code stream from the other code stream in order to correctly output video code stream for stereoscopic display.

Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Haskell et al (US 6,111,596) discloses a gain and offset correction for efficiency coding and improved display.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

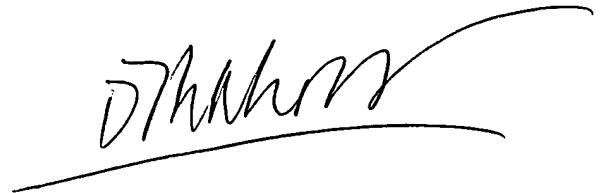
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ND
6/16/2006



NHON DIEP
PRIMARY EXAMINER